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## ACCEPTED MANUSCRIPT

## Mechanical properties and fractal analysis of the surface texture of sputtered hydroxyapatite

coatings

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**Graphical Abstract** 

Highlights

- Hydroxyapatite were prepared at temperatures in the range from 400 to 800 °C.
- The coatings prepared at 800 °C is closer to the stoichiometric hydroxyapatite.
- Hardness and elastic modulus decreased with increasing deposition temperature.
- The surface morphology strongly depends on the deposition temperature.

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